

ULSS 003778-15

USER'S LOGISTICS SUPPORT SUMMARY

**ENHANCED REFRIGERATION UNIT
(ERU)**

NSN: 4110-01-468-9792



MARINE CORPS SYSTEMS COMMAND
QUANTICO, VA 22134-5010

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JANUARY 2000

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DEPARTMENT OF THE NAVY
Headquarters, U.S. Marine Corps
Washington, DC 20380-001

31 January 2000

1. This User's Logistics Support Summary (ULSS) authenticated for Marine Corps use and effective upon receipt, advises the Fleet Marine Force and other selected commands of the plan to field and logistically support the Enhanced Refrigeration Unit (ERU), NSN 4930-01-462-1304.
2. Submit notice of discrepancies or suggested changes to this ULSS to: Commander, MARCORSYSCOM, Attn: PSL, 2033 Barnett Ave., Suite 315, Quantico, VA 22134-5010. In addition, forward an information copy to the Project Officer at the following address: Commander, MARCORSYSCOM, Attn: CSLE, 2033 Barnett Ave., Suite 315, Quantico, VA 22134-5010.
3. This ULSS is applicable to the Marine Corps Reserve.
4. This ULSS supersedes LAP 37-78, dated 1978.

BY DIRECTION OF THE COMMANDER MARINE CORPS SYSTEMS COMMAND

OFFICIAL:



G. N. GEORGEADIS
Director, Program Support
Marine Corps Systems Command

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USER'S LOGISTICS SUPPORT SUMMARY (ULSS)
FOR THE
ENHANCED REFRIGERATION UNIT (ERU)

1. Introduction

a. Source of Requirement. The Marine Corps has a requirement for a field refrigeration system as stated in Required Operational Capability NO. LOG 1.23. The system consists of a separate modular refrigeration unit and an International Organization for Standardization (ISO) compatible container. The current refrigeration unit uses refrigerant R-12 which is a Class I Ozone Depleting Substance (ODS). The Clean Air Act, as amended in 1992, calls for the replacement/retrofit of all equipment using Class I ODS by December 2000. The Enhanced Refrigeration Unit will replace the current inventory with equipment which uses an Environmental Protection Agency (EPA) compliant refrigerant. Appendix A contains the allowance listing and delivery schedule.

b. Points of Contact

Title	Activity	Telephone
Program Manager	MARCORSYSCOM CSLE QUANTICO, VA 22134	(703) 784-2242 X 261 DSN 278-2242
Asst Program Manager	MARCORSYSCOM CSLE QUANTICO, VA 22134	(703) 784-2242 X 266 DSN 278-2242
Project Officer	MARCORSYSCOM CSLE QUANTICO, VA 22134	(703) 784-2242 X 272 DSN 278-2242
Weapon System Manager	MARCORLOGBASES Code 837-1 ALBANY, GA 31704-0320	(912) 439-5436 DSN 567-5436
Warranty Administrator	MARCORLOGBASES Code 837-1 ALBANY, GA 31704-0320	(912) 439-5436 DSN 567-5436
Manufacturer	Thermo King Corp 314 West 90 th Street MINNEAPOLIS, MN 55420-3693 www.thermoking.com	(612) 887-2660 Fax: (612) 887-2689

c. System Description. The refrigeration unit is a 4500 British Thermal Units (BTU) one-piece condenser/evaporator refrigeration unit. It is used to cool/chill the 350 cu ft Refrigerator, Rigid Box, TAMCN B1710.

d. Operational Characteristics. This unit is a commercial item, which uses a semi-hermetic compressor for increased reliability that extends the service interval beyond the replaced item. It also uses R-404a refrigerant.

Salient Features		
Ambient Operating Temperature Range	Low	-65 ⁰ F (- ⁰ C)
	High	125 ⁰ F (+ ⁰ C)
Performance	Cooling Capacity	4500 BTU
Refrigerant	Type	R-404a
	Charge	5.3 lbs

e. Replaced Weapon Systems and Equipment. The ERU will replace National Stock Number (NSN) 4110-01-152-1946.

2. Administrative Information

a. Nomenclature. Enhanced Refrigeration Unit (ERU)

b. TAMCN. B1645 VIIB

c. Stores Account Code. SAC 3

d. NSN. 4110-01-468-9792

e. Item Designator. 10673A

f. Unit of Issue. Each

g. Unit Cost. \$5,500.00

h. Support Cost. \$125.00 per year

i. Physical Characteristics

	<u>Operational Configuration</u>	<u>Storage and Shipping Configuration</u>
<u>Length</u>	49.13 in (1248mm)	53.15 in (1350mm)
<u>Width</u>	44.05 in (1119mm)	48 in (1220mm)
<u>Height</u>	33.50 in (851mm)	40 in (1015mm)
<u>Square</u>	15.08 sq ft (1397m ²)	17.72 sq ft (1647m ²)
<u>Cube</u>	41.96 cu ft	59.06 cu ft
<u>Weight</u>	474lbs (215kg)	562 lbs (255kg)
<u>Stowage</u>	Cubic (1 level high)	Cubic (3 levels high)

Note: Uncrated Units cannot be stacked and should not be placed upside down.

j. Petroleum, Oil, and Lubricants. The Enhanced Refrigeration Unit requires 5.3 lbs. of refrigerant R-404a for normal operation. R404a is available using the following NSNs: 6830-01-457-7848 (15.4 KG Cylinder), 6830-01-457-7853 (43.9KG Cylinder). Consumption rate and frequency of change of the refrigerant will depend on the volume of use. Operators should monitor lubricant levels to ensure compliance with guidance given for checks in the operators' manual.

k. Equipment Density. Normal

l. Readiness Reporting. N/A

m. Power Requirements. 208/230 volts, 3 phase 60 Hz or 200 volts, 3 phase 50 Hz. The ERU will operate on tactical or commercial power.

n. Associated Weapons Systems and Equipment. The ERU is used with the 8' x 8' x 10' 350 cu ft Refrigeration Box (TAMCN B1710 VIIB).

3. Fielding Methodology

a. General Fielding Plan. Fielding will be done "vertically" commencing with II MEF during February FY00, I MEF during March FY00, and III MEF during April FY00. Reserve assets will be distributed in accordance with guidance provided by MARFORRES. Those reserve assets initially placed in stores will remain until gaining commands submit requisitions for their training allowances to MARCORLOGBASES, Albany. After placing each ERU into service, a like quantity of the older unit shall be turned into Defense Reutilization and Marketing Office (DRMO) on a one-for-one basis.

b. Method of Fielding. The ERU will be provided to gaining commands using a tailored Total Package Fielding Concept. MARCORSYSCOM will assume responsibility as the material fielder.

c. Fielding Responsibilities. Fielding of the ERU will be accomplished using a combination Material Fielding Team (MFT)/New Equipment Training Team (NETT).

Summary of actions required for support of the MFT/NETT and each major command are outlined below.

(1) Gaining Commands

(a) Establish a single POC with authority to resolve problems encountered during the fielding process. Representative should be available for the duration of the fielding evolution.

(b) Provide maximum personnel of Military Occupational Specialty (MOS) 1161, Refrigeration Mechanic and at least one MOS 1142, Electrical Equipment Repairman to assist in the placement of the equipment into service.

(c) Gaining commands are to provide a space large enough to unpack, inventory, inspect, perform operational checks, and store items. Space may be outside, but in case of inclement weather, overhead cover may be necessary.

(d) Provide access to an office area equipped with class "A" phone service for use by the MFT/NETT.

(e) Have sufficient number of **Common Tools** on hand, per section 4,e, (2), in order to install the ERU.

(f) Provide forklifts for lifting the ERU into position on the refrigeration box.

(2) MARCORLOGBASES, Albany

(a) Provide participant to the MFT/NETT.

(b) Provide temporary storage for those items not being put into immediate service.

(3) MARCORSYSCOM, Quantico

(a) Provide a MFT to conduct joint inventory, hand-off and all other actions required to field the new refrigeration units.

(b) Provide NCOIC as the MFT/NETT Leader.

(c) Coordinate funding, billeting and transportation requirements for the MFT/NETT.

(d) Transmit a coordinating message 15 days prior to the MFT/NETT arrival.

4. Logistics Support

a. Maintenance Support

(1) Maintenance Concept. The ERU maintenance concept will consist of organizational and immediate levels.

(a) Organizational Maintenance Level. That maintenance performed by personnel authorized to operate the item and as designated per supplement sheet to the Technical Manuals(TM). All fuses, drain hoses, cables and external panels are considered items of organizational maintenance. MOS 1161 as specified in the appropriate TMs and major component/repair listings will perform second echelon maintenance.

(b) Intermediate Maintenance Level. During the 37 months warranty period, units should first contact the warranty administrator at Albany, Code 837. Then, components listed in the supplement of the TM as beyond unit level of capability shall be referred to Thermo King Corp (refer to POCs, page 1). After the warranty expires, commands should follow their maintenance SOPs for equipment repair.

(2) Depot Support. There is no Depot Level Maintenance for this system.

(3) Calibration Requirements. N/A

b. Contractor Support Requirements. The contractor will provide logistics support for maintenance and repair parts to the operating forces worldwide. Using commands shall utilize the Government Purchase Card for purchases up to \$2,500. Commands should ensure future outlays of funds by properly planning and budgeting for their ERU. During the warranty period of 37 months, the contractor will provide maintenance support for the system.

c. Manpower, Personnel, and Training

(1) Personnel Requirement. No additional personnel are required. Existing maintenance personnel will be utilized.

(2) Training Requirements. Training will be as follows:

(a) Instructor/Key Personnel Training (IKPT). Instructors at the U.S. Army Ordnance Center and School, Aberdeen Proving Ground, Maryland and Key Personnel are scheduled to receive contractor training 19-20 Jan FY00 at the manufacturer's facility. This training will be viewed as a "train the trainer" session.

(b) MFT/NET. NET will be conducted in conjunction with the fielding of the ERU. ERU TMs will be used for instructional material.

(c) Entry Level Training. The Army Ordnance Center and School will incorporate operator and maintenance training into the school's program of instruction for MOS 1161, Refrigeration Mechanic.

(d) Operator Training/Licensing. After the completion of IKPT and NET, operator training will be accomplished by managed on-the-job-training at the using unit level.

(3) Training Support Items. There are no new training support items required.

d. Supply Support. Supply support will be provided via direct vendor support in order to ensure timely acquisition, provisioning, and inventory replenishment of system. Also, the vendor will be the source for collateral equipment components, spares, repair parts, and consumable supplies to maintain the ERU in a state of readiness. Thermo King intends to treat USMC as a commercial customer. Use of the Government Purchase Card will be required in order to obtain repair parts from Thermo King. All goods and services greater than \$2,500, will require a waiver (locally) to exceed the card limit.

e. Support Equipment. The ERU will require the following support equipment:

(1) Special Tools

Nomenclature	NSN	Echelon
Pump, Vacuum	4310-00-289-5967	3d
Heat Gun	4940-01-042-4855	2d & 3d
Screwdriver, Offset, Cross Tip No.1	5120-00-256-9014	2d & 3d
Installation and Removal Tool, Connector Electrical Contact	M81969/1-02	2d & 3d
Rivet Gun	5120-00-508-1588	3d
Key, Socket Head (Hex "L" Type 5/32", 6 Arm)	5120-01-160-1305	2d & 3d

(2) Common Tools

TAMCN	Nomenclature	NSN	Echelon
C7073	Tool Set, Common No. 1, Tactical	4910-01-238-8115	2d & 3d
C7036	Tool Kit, General Mechanics	5180-00-606-3566	3d
B2290	Maintenance Kit, Sup	3439-00-637-2668	2d & 3d
B2280	Tool Kit, Refrigeration, Equipment	5180-00-596-1474	2d & 3d

(3) Special Purpose Test Equipment. N/A

(4) General Purpose Test Equipment. N/A

(5) Application Program Sets and Test Program Sets. N/A

(6) Other Support Equipment

TAMCN	Nomenclature	NSN	Echelon
B1713	Recovery and Recycle Unit	4330-01-411-7240	3d
	Power Supply, 28 Volt DC	6130-01-143-5947	2d & 3d
	Pump, Diaphragm	4320-00-588-3590	3d

f. Technical Publications. One set (3 manuals) of commercial TM's will be overpacked with each end item.

PUBLICATIONS		
TM Number	TITLE	PCN
10673A-10/1	Operator's Manual	500 106730 00
10673A-12/2	Maintenance Manual	500 106731 00
10673A-30P/3	Parts Manual	500 106732 00

The unit publications clerk should ensure that the manuals for the ERU are added to their publication list to ensure automatic receipt of **future** changes or revisions to the manuals. Requests for additional copies of the manuals can be made through the Marine Corps Publications Distribution System (MCPDS). Address questions on distribution or requisitioning of technical manuals to: MARCORSYSCOM, Technical Publications Branch, at DSN 278-4570, commercial (703) 784-4570.

g. Computer Resources Support. N/A

h. Facilities. No change from the replaced systems.

i. Packaging, Handling, Storage and Transportation

(1) Packaging.

(a) No special packing, packaging requirements, special materials or containers are required for delivery from the Original Equipment Manufacturer (OEM). Use best commercial practice in accordance with ASTM D3951-98 for packing and preservation to ensure acceptance by the carrier. Marking for shipment shall be in accordance with MIL-STD-129.

(b) In the event the using unit has a warranted shipment for repair, a repair beyond the using capability or return to stock, preservation, and packaging shall be in accordance with level "B" requirements of MIL-STD-2073-1C, method 10. Marking for shipment shall be in accordance with MIL-STD-129.

(2) Handling. The units have lifting slots that allow for the use of a forklift during installation of the refrigeration box. There are no special procedures for lifting or moving.

(3) Storage. Inside storage is preferred but not required. If inside storage is not available, trucks, vans, CONEX containers and other containers may be used. The refrigeration unit should always be stored right side up.

(4) Transportation. The ERU is configured to allow for transport by truck, train, ship or air.

j. Warranty Provisions. The unit comes with a 37-month warranty effective upon acceptance by the Government at the factory. The warranty covers all parts and labor and will be initiated by the manufacturer prior to shipment from the factory. See Appendix C for details.

k. System Safety and Hazardous Materiel. The ERU contains two low risks hazards described below. The risk hazards have been reviewed and have been found to be acceptable providing safety warnings and instructions in the technical manual and training will be adhered.

(1) The unit contains R-404A, which is a toxic chemical. R-404A can cause affixation if leakage occurs. This material will be maintained/recycled by certified Heating Ventilation, and Air Conditioning Personnel.

(2) The system contains a plug and cable for power. This plug contains a three-prong unit and fifty feet of cable. The cable is shielded. Ensure proper electrical safety procedures are followed when using the system.

l. Waivers and Plan of Action and Milestones. N/A

5. Actions Required to Place the Equipment in Service

a. Gaining Commands

(1) Each MEF shall designate a POC for receipt of the ERUs.

(2) Upon receipt of the ERUs, place them in an administrative deadlined status and contact the Project Officer. The ERU will be inspected upon receipt and any defects will be documented on a Supply Deficiency Report (SDR) IAW SECNAV 4355.18A (if required).

(3) Upon arrival MFT/NETT, conduct a joint Limited Technical Inspection (LTI) and place refrigeration unit into service. Report any material defects immediately to the Project Officer. Performance deficiencies will be documented on a Product Quality Deficiency Report IAW MCO 4855.10-B (if required).

(4) Conduct training for those operators not attending formal training at the manufacturer's facility.

(5) Within six months of fielding, provide an assessment of all logistics elements, both problems and accomplishments, to MARCORSYSCOM/I&L/MARCORLOGBASES, Albany in accordance with MCO 4105.4 and TM 4420-15/1.

(6) Retrograde of Existing Equipment. This ULSS constitutes authority to turn the replaced items into the DRMO on a one-for-one basis. ***There is no need to request***

disposition instructions for the following NSN 4110-01-152-1946. Per MCBUL 5090, there is a requirement to recover Class I ODS from equipment that is being disposed of through DRMO. However, there is no requirement to return the ODS to Defense Logistics Agency. Each command should follow local procedures for ODS disposal.

(7) Obtaining Supporting Consumables. There are no new requirements for supporting consumables.

(8) Security Requirements. N/A.

(9) Controlled Items Reporting. N/A.

(10) Marine Corps Ground Equipment Resource Reporting (MCGERR). N/A.

b. MARCORLOGBASES, Albany

(1) Upon receipt of the ERU, conduct the following:

(a) Conduct a Limited Technical Inspection and report any material defects immediately to the Project Officer.

(b) Place the ERU into long term storage.

(2) Assume logistical support responsibility for ERU per MCO 4105.4.

(3) Resolve warranty issues and track warranty in-service dates (fielded equipment and stored equipment).

(4) Stock and issue applicable TMs.

c. MARCORSYSCOM, Quantico

(1) Maintain life cycle management of the system per MCO 4105.4 and TM 4420-15/1 as required.

(2) Assign a project officer to provide on-site control, coordination, and oversight of the overall fielding process.

(3) Program funds and budget for the initial fielding of the ERUs.

(4) Coordinate all fielding requirements and activities between gaining commands, MARCORLOGBASES, and the contractor.

(5) Notify MARCORLOGBASES, Albany of unit acceptance of equipment by serial number.

(6) Initiate action to ensure allowance data in the Equipment Allowance File coincides with the project in-service date.

d. Commanding General (CG), Marine Corps Combat Development Command (MCCDC). Request CG, MCCDC (C53), Quantico, Virginia update the LMIS files per instructions contained in this ULSS.

APPENDIX A
ALLOWANCES AND DELIVERY SCHEDULE

1. Published allowances and delivery schedule is applicable to this ULSS. Allowances for the ERU will be driven by the requirements for current refrigeration unit as listed in LMIS. The B1645 meets the same operational requirements as the equipment it replaces.
2. Unit requirements as shown in LMIS were used as a basis to generate these new allowances. Concerns related to allowances shall be brought to our immediate attention so that valid adjustments may be made. ERUs will not be provided for backup.

T/E	UNIT NAME	P L A N N E D	M U L T I	T O T A L	PLANNED DELIVERIES			
					FY00 BY QTR			
					1	2	3	4
015060	MARCOR ADMIN DET, ABERDEEN, MD	5	1			5		
7011	MCLB BARSTOW, CA	54	1				54	
7014	MCLB ALBANY, GA	55	1				55	
7851	HQBN, MCB, HI	1	1				1	
B1131	HQ CO, INF REFT 3D MARDIV	5	1				5	
B2309	HQ BTRY ARTY REG, 3D MARDIV	2	1				2	
B3311	HQSVC CO, CSSG-3 (HI)	5	1				5	
B3341	LDGSPTCO, CSSG-3 (HI)	5	1				5	
B3371	MED CO, CSSG-3 (HI)	1	1				1	
M4957	HQCO HQSVC BN FMFLANT	2	1			2		
N1012	HQCO, HQBN, 1ST MARDIV	4	1			4		
N1022	HQCO, HQBN, 2D MARDIV	2	1			2		
N1032	HQCO, HQBN, 3D MARDIV	2	1				2	
N1042	HQCO, HQBN, 4TH MARDIV	4	1				4	
N1043	SVC CO HQBN 4TH MARDIV	2	1				2	
N1111	HQCO INFREGT, 1ST MARDIV	5	2			10		
N1121	HQCO INFREGT, 2ND MARDIV	5	3			15		
N1131	HQCO INFREGT, 3RD MARDIV	5	1				5	
N1141	HQCO INFREGT, 4TH MARDIV	5	3				15	
N1231	H&SCO, COMBAT ASLTBN, 3RD MARDIV	2	1				2	
N1311	HQSVC CO, COMB ENG BN, 1ST MARDIV	2	1			2		
TOTALS						40	158	

T/E	UNIT NAME	P L A N N E D	M U L T I	T O T A L	PLANNED DELIVERIES			
					FY00 BY QTR			
					1	2	3	4
N1321	HQSVC CO, COMB ENG BN, 2ND MARDIV	2	1			2		
N1341	HQSVC CO, COMB ENG BN, 4TH MARDIV	2	1				2	
N1611	HQSVC CO ASSAULT AMPHIB BN, 1ST MARDIV	2	1			2		
N1621	HQSVC CO ASSAULT AMPHIB BN, 2ND MARDIV	2	1			2		
N1641	HQSVC CO ASSAULT AMPHIB BN, 4TH MARDIV	2	1				2	
N1751	H&SCO, 1ST RECONBN(LA), 1ST MARDIV	4	1			4		
N1761	H&SCO, 2ND RECONBN(LA), 2D MARDIV	4	1			4		
N1771	H&SCO, 3RD RECONBN(LA), 1ST MARDIV	4	1			4		
N1781	H&SCO, 4TH RECONBN(LA), 4TH MARDIV	4	1				4	
N2101	HQ BTRY, ARTY REGT, 1ST MARDIV	1	1			4		
N2109	HQBTRY, D/S(T)BN, ARTY REGT 1ST MARDIV	2	4			8		
N2201	HQ BTRY, ARTY REGT 2ND MARDIV	1	1			1		
N2209	HQ BTRY, ARTY BN, 3D MARDIV	2	4				8	
N2301	HQBTRY(-), ARTY REGT, 3RD MARDIV	1	1				1	
N2309	HQBTRY ARTY BN, ARTYREGT, 3RD MARDIV	2	1				2	
N2401	HQBTRY, ARTY REGT, 4TH MARDIV	1	1				1	
N2409	HQBTRY, ARTY BN, ARTYREGT 4TH MARDIV	2	5				10	
N3111	HQCO, HQSVC BN, 1ST FSSG	9	1			9		
N3121	HQSVC CO, SUPBN, 1ST FSSG	11	1			11		
N3125	MEDLOG CO SUPBN 1ST FSSG	2	1			2		
N3152	ENGRSPTCO, ENGRSPTBN 1ST FSSG	3	1			3		
N3171	HQSVC CO, MEDBN, 1ST FSSG	3	1			3		
N3172	SURGICAL SUPCO MEDBN, 2D FSSG	4	3			12		
N3191	H&S CO, SPTBN, 1ST FSSG	2	1			3		
N3211	HQCO, HQSVCBN, 2D FSSG	8	1			8		
N3221	H&SCO, SUPBN, 2ND FSSG	11	1			11		
N3225	MEDLOG CO, SUPBN, 2D FSSG	2	1			2		
N3252	ENGSTPT CO, ENGSTPTBN, 2D FSSG	3	1			3		
N3271	HQSVC CO, MEDBN, 2D FSSG	3	1			3		
N3272	SURGSUPT CO, MEDBN, 2D FSSG	4	3			12		
N3291	H&S CO, SPT BN, 3D FSSG	1	1				1	
N3311	HQCO HQSVCBN, 4 TH FSSG	7	1				7	
N3325	MEDLOG CO, SUPBN, 3D FSSG	2	1				2	
TOTALS						113	40	

T/E	UNIT NAME	P L A N N E D	M U L T I	T O T A L	PLANNED DELIVERIES			
					FY00 BY QTR			
					1	2	3	4
N3352	ENGSSUPCO, ENGSUPBN, 3D FSSG	3	1				3	
N3371	HQSVC CO, MEDBN, 3D FSSG	3	1				3	
N3372	SURGICAL SUPCO, MEDBN, 3D FSSG	4	2				4	
N3411	HQSVC CO, HQSVCBN, 4TH FSSG	8	1				8	
N3423	RATIONCO, SPTBN, 4 TH FSSG	11	1				11	
N3425	MEDLOG CO, SUPBN, 4 TH FSSG	2	1				2	
N3441	HQSVC CO, LOGSPTBN, 4 TH FSSG	1	1				1	
N3452	ENGR SUPTCO, ENGRSPTBN, 3D FSSG	3	1				3	
N3471	HQSVC CO, MEDBN, 4TH FSSG	3	1				3	
N3472	MED CO, MEDBN, 4TH FSSG	4	1				4	
N4606	H&S CO, 1ST SRI GROUP	8	1			8		
N4637	HQSVC CO, 1 ST RADIO BN	1	1			1		
N4683	SERVCO COMMBN I MHG	4	1			4		
N4706	HQCO, II MHG	8	1			8		
N4737	HQSVC CO, 2D RADIO BN, II MHG	1	1			1		
N4786	HQ CO, COMM BN, II MHG	2	1			2		
N4806	CE, III MHG (INCL BAND)	9	1				9	
N4883	SERV. CO. COMM BN III MHG	2	1				2	
N4986	HQCO, COMMBN MARFORRES	2	1				2	
N8631	HQ MACS, MACG, MAW	3	1			3		
N8702	MAINE WING SUPPORT SQUADRON(FW)	11	7			44	33	
N8703	MARINE WING SUPPORT SQUADRON(RW)	11	7			44	33	
W1121	HQCO, INF REGT, PREPONOR	2	1				2	
W1321	DET, HQSVC CO, PREPONOR	1	1				1	
W2209	HQBTRY, D/S(T)BN (M198) ARTY REGT, PREPONOR	4	1				4	
W3211	DET, HQSVC CO, HQVSCBN, FSSG, PREPONOR	4	1				4	
W3225	DET, MEDLOG CO, SUPBN, FSSG, PREPONOR	3	1				3	
W3241	DET, HQSVC CO, LSBN, FSSG, PREPONOR	1	1				1	
W3252	DET, SUP CO, ENGSUPBN, FSSG, PREPONOR	2	1				2	
W3271	DET, HQSVC CO, MEDBN, FSSG, PREPONOR	2	1				2	
W3272	DET, MED CO, MEDBN, FSSG, PREPONOR	1	2				2	
TOTAL						88	100	

T/E	UNIT NAME	P L A N N E D	M U L T I	T O T A L	PLANNED DELIVERIES			
					FY00 BY QTR			
					1	2	3	4
W4706	DET, CE, MEF (FWD) / PREPONOR	1	1				1	
W8640	DET, MACS, (REIN), MACG, PREPONOR	2	1				2	
W8702	DET, MWSS, (FW) PREPONOR	10	1				10	
W8703	DET, MWSS, (RW) PREPONOR	8	1				8	
095060	MC ADMIN DET, FT LEE VA	2	1				2	
TOTALS							23	

Note: The information provided above is accurate as of the date of publication of the ULSS. Subsequent changes to unit allowances or deliveries are reflected through modification of quantities in the Equipment Allowance File.

APPENDIX B
SCHEDULE OF EVENTS

<u>EVENT</u>	<u>EVENT DATE</u>
IKP Training	2nd QTR FY00
Final Provisioning	N/A
Initial Issue Of Spares	N/A
Initial Issue of B1645s	2nd QTR FY00

APPENDIX C
WARRANTY INSTRUCTIONS

1. General. The production manufacturer will provide a warranty to guarantee that all the supplies and parts conform to the design and manufacturing requirement. They must be free from all defects in materials and workmanship and conform to all performance requirements as delineated in the specifications of the contracts. Any claims or other issues related to warranties shall be forwarded *first* to the Warranty Administrator at MARCORLOGBASES, Albany (Code 837).
2. Type and Duration of Warranty. The basic warranty period is 37 months. This warranty is effective 37 months from the date equipment is accepted (DD-250 date) by the Government.
3. Warranty Administrator. The government activity responsible for administrative functions of the warranty program is MARCORLOGBASES, Albany. Point of contact is office code 837-1; business hours are 0730-1630 (Eastern Time Zone) MON-FRI. Telephone number: (912) 439-5436; DSN 567-5436; FAX: (912) 439-5406 or DSN 567-5406 or send Email to **stanchinajg@matcom.usmc.mil**.
4. Warranty Implementation
 - (a) Warranty implementation will be done by the manufacturer prior to shipping from factory. No actions are required by the user to initiate warranty. Refrigeration units will be put into service upon arrival of the Material Fielding Team/NETT. This will be accomplished by those members of the command that have been certified by Thermo King to install the units.
 - (b) Warranty Administrator will capture serial numbers and warranty dates from manufacturer. This information will be verified by MFT/NETT during installation.
 - (c) Thermo King shall endeavor to have a local representative on site during installation.

APPENDIX C
CONTINUED

THERMO KING CORPORATION'S EXTENDED TRUCK WARRANTY FOR CONTRACT# DAAD16-99-D-1024

Subject to the conditions hereinafter stated, Thermo King Corporation ("Thermo King") warrants its complete unit to be free from defects in material and workmanship for a period of thirty-seven (37) months from the date of acceptance of the unit by the Government. The acceptance date is the date stated on the applicable DD-250.

Such warranty extends only to the original owner of the unit and is limited at Thermo King's option to repair or replacement with new or remanufactured parts at any authorized Thermo King dealer or service affiliate of any parts which are found by Thermo King to have been defective under normal use and service within the specified warranty period. This warranty shall only cover labor and parts. Such repair or replacement shall be the Government's exclusive remedy and correction of defects in the above manner shall constitute complete fulfillment of all obligations and liabilities of Thermo King with respect to the unit sold hereunder, whether based in contract, in tort (including negligence and/or strict liability), or otherwise.

Any part of a unit which is repaired or furnished as a replacement under the terms of Thermo King's Warranty will be installed by any authorized Thermo King dealer or service affiliate without charge to the Government for labor or parts. Any part which is replaced shall become the property of Thermo King. Such warranty services must be performed by an authorized Thermo King dealer or service affiliate and will not include overtime, mileage, telephone calls or telegrams, or cost of transportation and/or relocation of equipment or service personnel.

Thermo King's warranty does not include consumable or maintenance items, such as, but not limited to, engine oil, lubricants, fuses, fuel, filters and filter elements, glow plugs, cleaning materials, light bulbs, refrigerant gases, dryers and batteries.

Thermo King's warranty shall not apply to any unit which (i) has been so installed, maintained, repaired or altered as, in Thermo King's judgment, to affect its integrity, (ii) has been subjected to misuse, negligent handling or accident, or (iii) has been operated contrary to Thermo King's printed instructions. Thermo King or any authorized Thermo King dealer or service affiliate shall have the right to require that the Government provide maintenance records to show that a unit has been properly maintained.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ALL WARRANTIES ARISING FROM COURSE OF DEALING OR CUSTOM OR USAGE OF TRADE, EXCEPT OF TITLE AND AGAINST PATENT INFRINGEMENT.

LIMITATION OF LIABILITY : THERMO KING SHALL HAVE NO LIABILITY IN CONTRACT OR IN TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR OTHERWISE, FOR ANY INJURY OR DAMAGE CAUSED TO VEHICLES, CONTENTS, PRODUCT CARGO OR OTHER PROPERTY OR FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, LOSS OR INTERRUPTION OF BUSINESS, LOST PROFITS AND LOSS OF USE. THE REMEDIES OF THE GOVERNMENT HEREIN ARE EXCLUSIVE AND THE TOTAL CUMULATIVE LIABILITY OF THERMO KING SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE UNIT OR PART ON WHICH SUCH LIABILITY IS BASED.